Wulf. Fl. Norica Phan. ed. Fenzl & Graf. 145 (1858). F. ovina subsp. eu-ovina var. capillata (Lam.) Hack. Monogr. Fest. 85 (1882); Hitche. in Gray Man. ed. 7, 162 (1908).— Field and herbarium study convince me that this is a clearly defined species rather than a variety of F. ovina. The principal characters which distinguish it from F. ovina are the capillary, usually longer and flexuous leaves, the smaller spikelets with awnless lemmas and the later date of flowering; in some cases as much as two weeks later than that of F. ovina.

CAMBRIDGE, MASSACHUSETTS.

SOME ALLIES OF ANTENNARIA ALPINA FROM NEW-FOUNDLAND AND THE LABRADOR PENINSULA.

M. L. FERNALD.

Antennaria cana (Fernald & Wiegand), n. comb. A. alpina, var. cana Fernald & Wiegand, Rhodora xiii. 24 (1911), in part. Planta humifusa, stolonibus foliosis confertis perbrevibus (ad 2 cm. longis); foliis basilaribus anguste cuneato-obovatis vel late oblanceolatis obtusis nec mucronatis basi latis 3–11 mm. longis 2–5 mm. latis supra albidis, tomento denso minuto; caule florifero 2.5–12 cm. alto gracile; foliis caulinis 9–15 subapproximatis linearibus, imis 8–15 mm. longis 1–2 mm. latis apice subulato, superioribus 5–8 mm. longis 0.5–1 mm. latis apice scarioso lanceolato; capitulis femineis (1–) 2–6 campanulatis corymbosis, pedicellis ad 1 cm. longis: involucro 5–7 mm. alto basi lanato; bracteis 3-seriatis subaequalibus tenuissimis, exterioribus oblongis obtusis brunneis, interioribus lanceolatis fulvis leviter fimbriatis; foveis receptaculi maturi denudati 60–100 0.1 mm. latis quam jugis separantibus acutis multo latioribus.

Humifuse, the crowded leafy stolons very short (up to 2 cm. long): rosette-leaves narrowly cuneate-obovate or broadly oblanceolate, obtuse, not mucronate, broad-based, 3–11 mm. long, 2–5 mm. broad, white above with dense minute tomentum: flowering stem 2.5–12 dm. high, slender: cauline leaves 9–15, rather crowded, linear, the lower 8–15 mm. long, 1–2 mm. broad, subulate-tipped; the upper 5–8 mm. long, 0.5–1 mm. wide, with a lanceolate scarious tip: pistillate heads (1–) 2–6, campanulate, corymbose, on pedicels up to 1 cm. long: involucre 5–7 mm. high, lanate at base: bracts 3-seriate, subequal, very thin, the outer oblong, brown; the inner lanceolate, tawny, slightly fimbriate: pits of the mature denuded receptacle 60–100,

0.1 mm. broad, much broader than the acute intermediate ridges.— Newfoundland: limestone barrens near sea-level, Pointe Riche, August 4, 1910, Fernald & Wiegand, no. 4,139 (Type of A. alpina, var. cana, in Gray Herb.); dry limestone barrens, upper slopes and tablelands, altitude 200–300 m., Table Mountain, Port à Port Bay, August 16, 1910, Fernald & Wiegand, no. 4,141, July 16 & 17, 1914, Fernald & St. John in Plantae Exsiccatae Grayanae.

When A. alpina, var. cana was published no clear characters were recognized by which to distinguish it specifically from A. alpina (L.) Gaertn. and specimens with canescent foliage were cited from Norway, Greenland, Labrador and Newfoundland. The recent collection of material, consisting of several hundred individuals, brought back from Table Mountain by Mr. St. John and the writer is so consistent in its characters and so different in some important points from A. alpina that a more detailed study of the group has been undertaken. A. alpina of northern Europe and Greenland and its var. canescens Lange, Fl. Dan. xvi. (fasc. xlvii), 9, t. 2786 (1869) — overlooked when var. cana was published — have the oblanceolate rosette-leaves terminated by a distinct short mucro, but in all the Newfoundland material the shorter more cuneate-obovate leaves are blunt. In A. alpina and var. canescens the denuded mature receptacle exhibits only 20-30 large pits 0.3-0.4 mm. broad, but in the Newfoundland plant, A. cana, the pits are very numerous (60-100) and much smaller, about 0.1 mm. broad. In A. alpina the cauline leaves are larger, the lower often 2 cm. long by 3 mm. wide, and commonly fewer (4-9). It seems wiser, therefore, to treat the plant of the Newfoundland limestones as a distinct species.

The specimens from Norway and Greenland, and two of those from Labrador originally cited under A. alpina, var. cana belong, apparently, to A. alpina, var. canescens Lange. But one of the Labrador plants so far departs from A. alpina, on the one hand, and A. cana, on the other, as to seem specifically separate from both. In this plant, collected by Mr. Sornborger at Rama, the rosette-leaves are like those of A. alpina, var. canescens, but the flowering stems, instead of being flexuous as in A. alpina and in A. cana, are stiffly erect, with crowded leaves; and the receptacle of the Rama plant resembles that of A. cana in its numerous tiny pits, but the intermediate ridges, instead of being acute, are rounded and as broad as the pits. This plant seems heretofore to have been unrecognized and it may be called

Antennaria Sornborgeri. Planta humifusa ramis prostratis subligneis 1 dm. longis, stolonibus confertis perbrevibus; foliis basilaribus

oblanceolatis 6–12 mm. longis 1.5–2 mm. latis ad apicem angustatis breviter mucronatis canescento-pannosis; caule florifero rigido erecto 0.4–11 dm. alto; foliis caulinis 9–12 approximatis linearibus 5–15 mm. longis 0.5–1.5 mm. latis, superioribus cum apice scarioso lanceolato villoso munitis; capitulis femineis 1–3 sessilibus campanulatis; involucro 6–7 mm. alto basi lanato; bracteis 3-seriatis subaequalibus, exterioribus lanceolatis brunneis, interioribus lineari-attenuatis fulvis, eroso-serrulatis; foveis receptaculi denudati 60–100 0.1 mm. latis juga

obtusa separantia latitudine subaequantibus.

Humifuse, with trailing subligneous branches 1 dm. long: stolons very short and crowded: rosette-leaves oblanceolate, 6–12 mm. long, 1.5–2 mm. wide, narrowed at summit to the short-mucronate tip, canescent-pannose: flowering stem stiffly erect, 0.4–1.1 dm. high: cauline leaves rather crowded, 9–12, linear, 5–15 mm. long, 0.5–1.5 mm. wide; the upper with villous lanceolate scarious tips: pistillate heads 1–3, sessile, campanulate: involucre 6–7 mm. high, lanate at base: bracts about 3-seriate, unequal; the outer lanceolate, brown; the inner linear-attenuate, yellowish-brown, erose-serrulate: pits of the denuded receptacle 60–100, 0.1 mm. broad, about as wide as the blunt-edged intermediate ridges.— Labrador: Rama, August 20–24, 1897, J. D. Sornborger, no. 156 (Type in Gray Herb.).

Antennaria alpina (L.) Gaertn., var. ungavensis, n. var., a forma typica recedit caulibus floriferis elongatis 2–2.3 dm. altis; foliis caulinis 9–13; capitulis 1–2, inferiore pedicello 1–1.5 cm. longo.— Ungava: Stillwater River, August 12, 1896, Spreadborough, Geol. Surv. Can.

no. 44,442 (TYPE in Gray Herb.).

The material was distributed as A. labradorica Nutt. but it seems highly improbable that it is that problematical species. In all its technical points, glabrous oblanceolate mucronate rosette-leaves, the oblong glabrous appendages of the upper cauline leaves, the involucre, and the pits of the receptacle, in no way departing from typical A. alpina as understood by the writer, but noteworthy for its very tall stature, numerous cauline leaves, and the long-pediceled lower head of the 2-headed inflorescence.

GRAY HERBARIUM.